

RAW SEQUENCE LISTING

DATE: 05/23/2000

PATENT APPLICATION: US/09/225,502A

TIME: 21:22:02

Input Set : A:\Pto.amc

Output Set: N:\CRF3\05232000\I225502A.raw

3 <110> APPLICANT: Moore et al.
 5 <120> TITLE OF INVENTION: Human FK506 Binding Proteins
 7 <130> FILE REFERENCE: PF392
 9 <140> CURRENT APPLICATION NUMBER: 09/225,502A
 10 <141> CURRENT FILING DATE: 1999-01-06
 12 <150> PRIOR APPLICATION NUMBER: 60/070,875
 13 <151> PRIOR FILING DATE: 1998-01-09
 15 <160> NUMBER OF SEQ ID NOS: 8
 17 <170> SOFTWARE: PatentIn Ver. 2.1
 19 <210> SEQ ID NO: 1
 20 <211> LENGTH: 1234
 21 <212> TYPE: DNA
 22 <213> ORGANISM: Homo sapiens
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 26 <222> LOCATION: (61)..(1071)
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 32 Met Phe Pro Ala Gly Pro Pro Ser His Ser Leu Leu Arg Leu Pro Leu
 33 1 5 10 15
 35 ctg cag ttg ctg cta ctg gtg gtg cag gcc gtg ggg agg ggg ctg ggc 156
 36 Leu Gln Leu Leu Leu Val Val Gln Ala Val Gly Arg Gly Leu Gly
 37 20 25 30
 39 cgc gcc agc ccg gcc ggg ggc ccc ctg gaa gat gtg gtc atc gag agg 204
 40 Arg Ala Ser Pro Ala Gly Gly Pro Leu Glu Asp Val Val Ile Glu Arg
 41 35 40 45
 43 tac cac atc ccc agg gcc tgt ccc cgg gaa gtg cag atg ggg gat ttt 252
 44 Tyr His Ile Pro Arg Ala Cys Pro Arg Glu Val Gln Met Gly Asp Phe
 45 50 55 60
 47 gtg cgc tac cac tac aac ggc act ttt gaa gat ggc aag aag ttt gat 300
 48 Val Arg Tyr His Tyr Asn Gly Thr Phe Glu Asp Gly Lys Lys Phe Asp
 49 65 70 75 80
 51 tca agc tat gat cgc aac acc ttg gtg gcc atc gtg gtg ggt gtg ggg 348
 52 Ser Ser Tyr Asp Arg Asn Thr Leu Val Ala Ile Val Val Gly Val Gly
 53 85 90 95
 55 cgc ctc atc act ggc atg gac cga ggc ctc atg ggc atg tgt gtc aac 396
 56 Arg Leu Ile Thr Gly Met Asp Arg Gly Leu Met Gly Met Cys Val Asn
 57 100 105 110
 59 gag cgg cga cgc ctc att gtg cct ccc cac ctg ggc tat ggg agc atc 444
 60 Glu Arg Arg Arg Leu Ile Val Pro Pro His Leu Gly Tyr Gly Ser Ile
 61 115 120 125
 63 ggc ctg gcg ggg ctc att cca ccg gat gcc acc ctc tac ttc gat gtg 492
 64 Gly Leu Ala Gly Leu Ile Pro Pro Asp Ala Thr Leu Tyr Phe Asp Val
 65 130 135 140
 67 gtt ctg ctg gat gtg tgg aac aag gaa gac acc gtg cag gtg agc aca 540
 68 Val Leu Leu Asp Val Trp Asn Lys Glu Asp Thr Val Gln Val Ser Thr

P.5

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Input Set : A:\Pto.amc

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72 Leu Leu Arg Pro Pro His Cys Pro Arg Met Val Gln Asp Gly Asp Phe
73          165          170          175
75 gtc cgc tac cac tac aat ggc acc ctg ctg gac ggc acc tcc ttc gac 636
76 Val Arg Tyr His Tyr Asn Gly Thr Leu Leu Asp Gly Thr Ser Phe Asp
77          180          185          190
79 acc agc tac agt aag ggc ggc act tat gac acc tac gtc ggc tct ggt 684
80 Thr Ser Tyr Ser Lys Gly Gly Thr Tyr Asp Thr Tyr Val Gly Ser Gly
81          195          200          205
83 tgg ctg atc aag ggc atg gac cag ggg ctg ctg ggc atg tgt cct gga 732
84 Trp Leu Ile Lys Gly Met Asp Gln Gly Leu Leu Gly Met Cys Pro Gly
85          210          215          220
87 cag aga agg aag att atc atc cct cca ttc ctg gcc tat ggc gag aaa 780
88 Gln Arg Arg Lys Ile Ile Ile Pro Pro Phe Leu Ala Tyr Gly Glu Lys
89 225          230          235          240
91 ggc tat ggt gag ggt ggg caa gga cac aag ggg aaa ttc cgc aga aga 828
92 Gly Tyr Gly Glu Gly Gly Gln Gly His Lys Gly Lys Phe Arg Arg Arg
93          245          250          255
95 ggg aaa aac cag gcc tcc aca tac agt tgc tca ggt tgt ata ctg cac 876
96 Gly Lys Asn Gln Ala Ser Thr Tyr Ser Cys Ser Gly Cys Ile Leu His
97          260          265          270
99 gag ggc atc caa cca agg act caa ggt ggg atg aaa tct acc ctt ggt 924
100 Glu Gly Ile Gln Pro Arg Thr Gln Gly Gly Met Lys Ser Thr Leu Gly
101          275          280          285
103 gct act aag aag ggg tgc ttt ggc cgg gcg tgg tgg ctc acg ctt gta 972
104 Ala Thr Lys Lys Gly Cys Phe Gly Arg Ala Trp Trp Leu Thr Leu Val
105          290          295          300
107 atc cca gca ctt tgg gaa gcc aag gcg gga gga tca cga ggt cca gga 1020
108 Ile Pro Ala Leu Trp Glu Ala Lys Ala Gly Gly Ser Arg Gly Pro Gly
109 305          310          315          320
111 gat cga gac cac ggt gaa acc ccg tct cta cta aaa ata caa aaa aat 1068
112 Asp Arg Asp His Gly Glu Thr Pro Ser Leu Leu Lys Ile Gln Lys Asn
113          325          330          335
115 tag ccgggcgtgg tgggggcgcc tgtagtccca gctactcgga gaggctgagg 1121
118 caggaaaatg acgtgaaccc gggagggcga gcttgagtg agccgagatc ttgccactgc 1181
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125 <212> TYPE: PRT
126 <213> ORGANISM: Homo sapiens
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132 20 25 30
133 Arg Ala Ser Pro Ala Gly Gly Pro Leu Glu Asp Val Val Ile Glu Arg
134 35 40 45
135 Tyr His Ile Pro Arg Ala Cys Pro Arg Glu Val Gln Met Gly Asp Phe

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137 Val Arg Tyr His Tyr Asn Gly Thr Phe Glu Asp Gly Lys Lys Phe Asp
138 65      70      75      80
139 Ser Ser Tyr Asp Arg Asn Thr Leu Val Ala Ile Val Val Gly Val Gly
140      85      90      95
141 Arg Leu Ile Thr Gly Met Asp Arg Gly Leu Met Gly Met Cys Val Asn
142      100     105     110
143 Glu Arg Arg Arg Leu Ile Val Pro Pro His Leu Gly Tyr Gly Ser Ile
144      115     120     125
145 Gly Leu Ala Gly Leu Ile Pro Pro Asp Ala Thr Leu Tyr Phe Asp Val
146      130     135     140
147 Val Leu Leu Asp Val Trp Asn Lys Glu Asp Thr Val Gln Val Ser Thr
148 145     150     155     160
149 Leu Leu Arg Pro Pro His Cys Pro Arg Met Val Gln Asp Gly Asp Phe
150      165     170     175
151 Val Arg Tyr His Tyr Asn Gly Thr Leu Leu Asp Gly Thr Ser Phe Asp
152      180     185     190
153 Thr Ser Tyr Ser Lys Gly Gly Thr Tyr Asp Thr Tyr Val Gly Ser Gly
154      195     200     205
155 Trp Leu Ile Lys Gly Met Asp Gln Gly Leu Leu Gly Met Cys Pro Gly
156      210     215     220
157 Gln Arg Arg Lys Ile Ile Ile Pro Pro Phe Leu Ala Tyr Gly Glu Lys
158 225     230     235     240
159 Gly Tyr Gly Glu Gly Gly Gln Gly His Lys Gly Lys Phe Arg Arg Arg
160      245     250     255
161 Gly Lys Asn Gln Ala Ser Thr Tyr Ser Cys Ser Gly Cys Ile Leu His
162      260     265     270
163 Glu Gly Ile Gln Pro Arg Thr Gln Gly Gly Met Lys Ser Thr Leu Gly
164      275     280     285
165 Ala Thr Lys Lys Gly Cys Phe Gly Arg Ala Trp Trp Leu Thr Leu Val
166      290     295     300
167 Ile Pro Ala Leu Trp Glu Ala Lys Ala Gly Gly Ser Arg Gly Pro Gly
168 305     310     315     320
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175 <211> LENGTH: 2145
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179 <220> FEATURE:
180 <221> NAME/KEY: CDS
181 <222> LOCATION: (2)..(1324)
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186 1      5      10      15
188 gtg agc aca ttg ctg cgc ccg ccc cac tgc ccc cgc atg gtc cag gac 97
189 Val Ser Thr Leu Leu Arg Pro Pro His Cys Pro Arg Met Val Gln Asp
190      20      25      30

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192 ggc gac ttt gtc cgc tac cac tac aat ggc acc ctg ctg gac ggc acc 145
193 Gly Asp Phe Val Arg Tyr His Tyr Asn Gly Thr Leu Leu Asp Gly Thr
194          35          40          45
196 tcc ttc gac acc agc tac agt aag ggc ggc act tat gac acc tac gtc 193
197 Ser Phe Asp Thr Ser Tyr Ser Lys Gly Gly Thr Tyr Asp Thr Tyr Val
198          50          55          60
200 ggc tct ggt tgg ctg atc aag ggc atg gac cag ggg ctg ctg ggc atg 241
201 Gly Ser Gly Trp Leu Ile Lys Gly Met Asp Gln Gly Leu Leu Gly Met
202 65          70          75          80
204 tgt cct gga gag aga agg aag att atc atc cct cca ttc ctg gcc tat 289
205 Cys Pro Gly Glu Arg Arg Lys Ile Ile Ile Pro Pro Phe Leu Ala Tyr
206          85          90          95
208 ggc gag aaa ggc tat ggg aca gtg atc ccc cca cag gcc tcg ctg gtc 337
209 Gly Glu Lys Gly Tyr Gly Thr Val Ile Pro Pro Gln Ala Ser Leu Val
210          100          105          110
212 ttt cac gtc ctc ctg att gac gtg cac aac ccg aag gac gct gtc cag 385
213 Phe His Val Leu Leu Ile Asp Val His Asn Pro Lys Asp Ala Val Gln
214          115          120          125
216 cta gag acg ctg gag ctc ccc ccc ggc tgt gtc cgc aga gcc ggg gcc 433
217 Leu Glu Thr Leu Glu Leu Pro Gly Cys Val Arg Arg Ala Gly Ala
218          130          135          140
220 ggg gac ttc atg cgc tac cac tac aat ggc tcc ttg atg gac ggc acc 481
221 Gly Asp Phe Met Arg Tyr His Tyr Asn Gly Ser Leu Met Asp Gly Thr
222 145          150          155          160
224 ctc ttc gat tcc agc tac tcc cac aac cac acc tac aat acc tat atc 529
225 Leu Phe Asp Ser Ser Tyr Ser His Asn His Thr Tyr Asn Thr Tyr Ile
226          165          170          175
228 ggg cag ggt tac atc atc ccc ggg atg gac cag ggg ctg cag ggt gcc 577
229 Gly Gln Gly Tyr Ile Ile Pro Gly Met Asp Gln Gly Leu Gln Gly Ala
230          180          185          190
232 tgc atg ggg gaa cgc cgg aga att acc atc ccc ccg cac ctc gcc tat 625
233 Cys Met Gly Glu Arg Arg Arg Ile Thr Ile Pro Pro His Leu Ala Tyr
234          195          200          205
236 ggg gag aat gga act gga gac aag atc cct ggc tct gcc gtg cta atc 673
237 Gly Glu Asn Gly Thr Gly Asp Lys Ile Pro Gly Ser Ala Val Leu Ile
238          210          215          220
240 ttc aac gtc cat gtc att gac ttc cac aac cct gcg gat gtg gtg gaa 721
241 Phe Asn Val His Val Ile Asp Phe His Asn Pro Ala Asp Val Val Glu
242 225          230          235          240
244 atc agg aca ctg tcc cgg cca tct gag acc tgc aat gag acc acc aag 769
245 Ile Arg Thr Leu Ser Arg Pro Ser Glu Thr Cys Asn Glu Thr Thr Lys
246          245          250          255
248 ctt ggg gac ttt gtt cga tac cat tac aac tgt tct ttg ctg gac ggc 817
249 Leu Gly Asp Phe Val Arg Tyr His Tyr Asn Cys Ser Leu Leu Asp Gly
250          260          265          270
252 acc cag ctg ttc acc tcg cat gac tac ggg gcc ccc cag gag gcg act 865
253 Thr Gln Leu Phe Thr Ser His Asp Tyr Gly Ala Pro Gln Glu Ala Thr
254          275          280          285
256 ctc ggg gcc aac aag gtg atc gaa ggc ctg gac acg ggc ctg cag ggc 913

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257 Leu Gly Ala Asn Lys Val Ile Glu Gly Leu Asp Thr Gly Leu Gln Gly
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260 atg tgt gtg gga gag agg cgg cag ctc atc gtg ccc ccg cac ctg gcc 961
261 Met Cys Val Gly Glu Arg Gln Leu Ile Val Pro Pro His Leu Ala
262 305      310      315      320
264 cac ggg gag agt gga gcc cgg gga gtc cca ggc agt gct gtg ctg ctg 1009
265 His Gly Glu Ser Gly Ala Arg Gly Val Pro Gly Ser Ala Val Leu Leu
266      325      330      335
268 ttt gag gtg gag ctg gtg tcc cgg gag gat ggg ctg ccc aca ggc tac 1057
269 Phe Glu Val Glu Leu Val Ser Arg Glu Asp Gly Leu Pro Thr Gly Tyr
270      340      345      350
272 ctg ttt gtg tgg cac aag gac cct cct gcc aac ctg ttt gaa gac ata 1105
273 Leu Phe Val Trp His Lys Asp Pro Pro Ala Asn Leu Phe Glu Asp Ile
274      355      360      365
276 gac ctc aac aag gat ggc gag gtc cct ccg gag gag ttc tcc acc ttc 1153
277 Asp Leu Asn Lys Asp Gly Glu Val Pro Pro Glu Glu Phe Ser Thr Phe
278      370      375      380
280 atc aag gct caa gtg agt gag ggc aaa gga cgc ctc atg cct ggg cag 1201
281 Ile Lys Ala Gln Val Ser Glu Gly Lys Gly Arg Leu Met Pro Gly Gln
282 385      390      395      400
284 gac cct gag aaa acc ata gga gac atg ttc cag aac cag gac cgc aac 1249
285 Asp Pro Glu Lys Thr Ile Gly Asp Met Phe Gln Asn Gln Asp Arg Asn
286      405      410      415
288 cag gac ggc aag atc aca gtc gac gag ctc aag ctg aag tca gat gag 1297
289 Gln Asp Gly Lys Ile Thr Val Asp Glu Leu Lys Leu Lys Ser Asp Glu
290      420      425      430
292 gac gag gag cgg gtc cac gag gag ctc tgaggggagc ggagcctggc 1344
293 Asp Glu Glu Arg Val His Glu Glu Leu
294      435      440
296 caggcctgag acacagaggc ccactgagag ggggacagtg gcggtgggac tgacctgctg 1404
298 acagtcaccc tccctctgct gggatgaggt ccaggagcca actaaacaa tggcagagga 1464
300 gacatctctg gtgttccccc caccctagat gaaaatccac agcacagacc tctaccgtgt 1524
302 ttctcttcca tccctaaacc acttctttaa aatgtttgga ttgcaaaagc caatttgggg 1584
304 cctgtggagc ctgggggttg atagggccat ggctggtccc ccaccatacc tccctccac 1644
306 atcactgaca cagctgagct tgttatccat ctccccaac tttctcttc tttgtacttc 1704
308 ttgtcatccc cactccagc cctattcct ctatgtgaca gctggctagg acccctctgc 1764
310 cttcctcccc aatcctgact ggctcctagg gaaggggaag gctcctggag ggcagcccta 1824
312 cctctcccat gccctttgcc ctccctccctc gctccagtg gaggctgagc tgaccctggg 1884
314 ctgctggagg ccagactggg ctgtagttag cttttcctcc ctaaagaagg ctttccctaa 1944
316 ggaacccatag aagagaggaa gaaaacaaag ggcattgtgt agggaaagctg cttgggtggg 2004
318 tgttagggct atgaaatctt ggatttgggg ctgaggggtg ggagggaggg cagagctctg 2064
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326 <211> LENGTH: 441
327 <212> TYPE: PRT
328 <213> ORGANISM: Homo sapiens
330 <400> SEQUENCE: 4
331 Phe Asp Val Val Leu Leu Asp Val Trp Asn Lys Glu Asp Thr Val Gln

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY

DATE: 05/23/2000

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Input Set : A:\Pto.amc

Output Set: N:\CRF3\05232000\I225502A.raw

L:621 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:622 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:658 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:682 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:691 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:693 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:695 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:703 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:705 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:707 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:709 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:806 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:6
L:806 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:6
L:806 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:6
L:806 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:6
L:806 M:340 W: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:6
L:833 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:6
L:833 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:6
L:833 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:6
L:833 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:6
M:340 Repeated in SeqNo=6
L:851 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:6
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